What is claimed is:

1.   A   method   of   controlling   a   solenoid   actuator,
comprising the step of:

canceling   hysteresis   characteristics   of   the
solenoid actuator by a solenoid drive current controller
5   that stabilizes a solenoid drive current to a target value
through   a   swinging   period   in   which   the   solenoid   drive
current is swung up and down about the target value when
the solenoid drive current is controlled toward the target
value.

2.   The method according to Claim 1, further comprising
the steps of:

starting the solenoid drive current controller with
using   a   leading   edge   of   a   current   control   signal   as   a
5   trigger; and

superimposing an alternating wave produced from the
solenoid drive current controller on the current control
signal for a given time.

3.   The   method   according   to   Claim   2,   wherein   the
current control signal for starting the solenoid drive
current   controller   is   supplied   from   a   solenoid   control
circuit to a solenoid drive circuit.

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4.   The method according to Claim 1, further comprising the steps of:

    producing a control signal analogous to a current value pattern for the solenoid actuator;

5   delivering the control signal to a solenoid drive circuit.